Historical Conditions - Hourly - v3.0

Domain Portfolio: Conditions | Domain: Historical | Usage Classification: Standard

Geography: Global **Attribution Required:** NO **Attribution Requirements:** N/A

Overview

The Weather Historical Conditions are generated on demand from The Weather Company (TWC) Currents On Demand (COD) system. The API provides information on temperature, precipitation, wind, barometric pressure, visibility, ultraviolet (UV) radiation, and other related weather observations elements as well as date/time, weather icon codes and phrases.

HTTP Headers and Data Lifetime - Caching and Expiration

For details on appropriate header values as well as caching and expiration definitions, please see **The Weather Company Data | API Common Usage Guide**.

Translated Fields

This TWC API handles the translation of phrases. However, when formatting a request URL a valid language must be passed along (see the language code table for the supported codes).

- dayOfWeek
- windDirectionCardinal
- pressureTendencyTrend
- wxPhraseLong
- uvDescription

URL Construction

Atomic API URL Examples:	**Aggregate Product Name**	v3-wx-conditions-historical-hourly-1day
Atomic Request by Geocode: Required Parameters: geocode, units, language, format **| Optional Parameter:** par https://api.weather.com/v3/wx/conditions/historical/hourly/1day?**geocode=<geocode>**&language=<language>&format=<format>&units=<units>&apiKey**=yourApiKey**		
https://api.weather.com/v3/wx/conditions/historical/hourly/1day?**geocode=33.74,-84.39**&language=en-US&format=json&units=e&apiKey**=yourApiKey**		
Atomic Request by IATA Code: Required Parameters: iataCode, units, language, format, apiKey **| Optional Parameter:** par https://api.weather.com/v3/wx/conditions/historical/hourly/1day?**iataCode=<iataCode>**&language=<language>&format=<format>&units=<unit>&apiKey**=yourApiKey**		
https://api.weather.com/v3/wx/conditions/historical/hourly/1day?**iataCode=FCO**&language=en-US&format=json&units=e&apiKey=**yourApiKey**		
Atomic Request by ICAO Code: Required Parameters: icaoCode, units, language, format, apiKey **| Optional Parameter:** par https://api.weather.com/v3/wx/conditions/historical/hourly/1day?**icaoCode=<icaoCode>**&language=<language>&format=<format>&units=<units>&apiKey**=yourApiKey**		
https://api.weather.com/v3/wx/conditions/historical/hourly/1day?**icaoCode=LIRF**&language=en-US&format=json&units=e&apiKey**=yourApiKey**		
Atomic Request by Place ID: Required Parameters: placeid, language, format, apiKey **| Optional Parameter:** par https://api.weather.com/v3/wx/conditions/historical/hourly/1day?**placeid=<placeid>**&language=<language>&format=<format>&units=<units>&apiKey**=yourApiKey**		
https://api.weather.com/v3/wx/conditions/historical/hourly/1day?**placeid=25d07eca1bcda02800c1a9e699d7eb1c8132cad9bc2d6efa8a2531f0ee4a81cd**&language=en-US&format=json&units=e&apiKey=**yourApiKey**		

Atomic Request by Postal Key: Required Parameters: postalKey, units, language, format, apiKey=**yourApiKey** | **Optional Parameter:** par
https://api.weather.com/v3/wx/conditions/historical/hourly/1day?**postalKey=<postalKey>**&language=<language>&format=<format>&units=<units>&apiKey**=yourApiKey**

https://api.weather.com/v3/wx/conditions/historical/hourly/1day?**postalKey=30339:US**&language=en-US&format=json&units=e&apiKey**=yourApiKey**

Data Elements & Definitions

Note: Field names are sorted alphabetically in the table below for presentation purposes. The table below does not represent the sort order of the API response.

Field Name	Description	Type	Range	Sample	Nulls Allowed
cloudCeiling	Base of lowest Mostly Cloudy or Cloudy layer. Note: This field can be NULL for any geographic location depending weather conditions	[integer]	Base of lowest Mostly Cloudy or Cloudy layer Note: This field can be NULL for any geographic location depending weather conditions	1200	Y
dayOfWeek	Day of week	[string]	Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday	Thursday	Y
dayOrNight	Daytime or nighttime of the local apparent time of the location	[string]	D = Day, N = Night, X = Missing (for extreme northern and southern hemisphere	D	Y
expirationTimeUtc	Expiration time in UNIX in UNIX epoch value	[epoch]	-	1369252800	Y
iconCode	This number is the key to the weather icon lookup. The data field shows the icon number that is matched to represent the observed weather conditions.	[integer]	0 to 47	30	Y
iconCodeExtend	A four digit code representing the full set of sensible weather icons. These codes are companions to iconCode with more specificity. **Note**: Reserved for internal purposes only.	[integer]	-	3200	Y
precip24Hour	Liquid precip amount in the last 24 hours. **Note:** Arrival of new, refined data inputs may cause output values to change throughout a given day	[decimal]	-	0	Y
pressureAltimeter	Barometric pressure is the pressure exerted by the atmosphere at the Earth's surface due to the weight of the air. Expressed in inches of mercury when units=a (i.e. units='US'), expressed in millibars when units=Metric, Hybrid or Metric_SI	[decimal]	Inches of mercury, precise to hundredths… Precision to tenths when in millibars	30.18	Y
pressureChange	Change in pressure in the last three hours (inches of mercury for units=US, millibars otherwise)	[decimal]	-	-0.03	Y
pressureMeanSeaLevel	Mean sea level pressure in millibars	[decimal]	Millibars, precise to 1/10th mb	1022.4	Y
pressureTendencyCode	Code of pressure tendency. 0 = steady, 1 = rising, 2 = falling, 3 = rising rapidly, 4 = falling rapidly	[integer]	0 - 4	0	Y
pressureTendencyTrend	Descriptive text of pressure tendency over the past three hours.	[string]	Steady, Rising, Rapidly Rising, Falling, Rapidly Falling	Steady	Y
relativeHumidity	The relative humidity of the air, which is defined as the ratio of the amount of water vapor in the air to the amount of vapor required to bring the air to saturation at a constant temperature. Relative humidity is always expressed as a percentage.	[integer]	0 to 100	55	Y
snow24Hour	Snowfall amount in the last 24 hours. **Note:** Arrival of new, refined data inputs may cause output values to change throughout a given day	[decimal]	-	0	Y
sunriseTimeLocal	This field contains the local time of the sunrise. It reflects any local daylight savings conventions. For a few Arctic and Antarctic regions, the Sunrise and Sunset data values may be the same (each with a value of 12:01am) to reflect conditions where a sunrise or sunset does not occur.	[ISO]	YYYY-MM-DDTHH:MM:SS-NNNN; NNNN=GMT offset	2014-08-20T10:47:59-0500	Y
sunriseTimeUtc	Sunrise time in UNIX epoch value	[epoch]	-	1369252800	Y

sunsetTimeLocal	This field contains the local time of the sunset. It reflects any local daylight savings conventions. For a few Arctic and Antarctic regions, the Sunrise and Sunset data values may be the same (each with a value of 12:01am) to reflect conditions where a sunrise or sunset does not occur.	[ISO]	YYYY-MM-DDTHH:MM:SS-NNNN; NNNN=GMT offset	2014-08-20T10:47:59-0500	Y
sunsetTimeUtc	Sunset time in UNIX epoch value	[epoch]	-	1369252800	Y
temperature	Temperature in defined unit of measure	[integer]	-140 to 140	74	Y
temperatureChange24Hour	Change in temperature compared to the report 24 hours ago.	[integer]	-	-26	Y
temperatureDewPoint	The temperature which air must be cooled at constant pressure to reach saturation. The Dew Point is also an indirect measure of the humidity of the air. The Dew Point will never exceed the Temperature. When the Dew Point and Temperature are equal, clouds or fog will typically form. The closer the values of Temperature and Dew Point, the higher the relative humidity.	[integer]	-80 to 100 (°F) or -62 to 37 (°C)	60	Y
temperatureFeelsLike	An apparent temperature. It represents what the air temperature “feels like” on exposed human skin due to the combined effect of the wind chill or heat index. When the temperature is 65°F or higher, the Feels Like value represents the computed Heat Index. When the temperature is below 65°F, the Feels Like value represents the computed Wind Chill. Units - Expressed in fahrenheit when units=e, expressed in celsius when units=m, s, or h. Range is -140 to 140	[integer]	-140 to 140	101	Y
temperatureHeatIndex	An apparent temperature. It represents what the air temperature “feels like” on exposed human skin due to the combined effect of warm temperatures and high humidity. Below 65°F, it is set = to the temperature. Units - Expressed in fahrenheit when units=e, expressed in celsius when units=m, s, or h.	[integer]	-	98	Y
temperatureMax24Hour	Max temperature in the last 24 hours	[integer]	-	65	Y
temperatureMaxSince7Am	Max temperature since 7 A.M.	[integer]	-	65	Y
temperatureMin24Hour	Min temperature in the last 24 hours	[integer]	-	65	Y
temperatureWindChill	An apparent temperature. It represents what the air temperature “feels like” on exposed human skin due to the combined effect of the cold temperatures and wind speed. Above 65°F, it is set = to the temperature. Units - Expressed in fahrenheit when units=e, expressed in celsius when units=m, s, or h	[integer]	-	-34	Y
uvDescription	The UV Index Description which complements the UV Index value by providing an associated level of risk of skin damage due to exposure. -2 = Not Available, -1 = No Report, 0 to 2 = Low, 3 to 5 = Moderate, 6 to 7 = High, 8 to 10 = Very High, 11 to 16 = Extreme	[string]	Not Available, No Report, Low, Moderate, High, Very High, Extreme	Low	Y
uvIndex	TWC-created UV index	[integer]	0 to 11	6	Y
validTimeLocal	Time observation is valid ... . in local, but at top of next UTC hour	[ISO]	YYYY-MM-DDTHH:MM:SS-NNNN; NNNN=GMT offset	2014-08-20T10:47:59-0500	Y
validTimeUtc	Time observation is valid in UNIX epoch value	[epoch]	-	1369252800	Y
visibility	The horizontal visibility at the observation point. Visibilities can be reported as fractional values particularly when visibility is less than 2 miles. Visibilities greater than 10 statute miles(16.1 kilometers) which are considered “unlimited” are reported as “999” in your feed. You can also find visibility values that equal zero. This occurrence is not wrong. Dense fogs and heavy snows can produce values near zero. Fog, smoke, heavy rain and other weather phenomena can reduce visibility to near zero miles or kilometers.	[decimal]	0 to 999 or null; For greater than 1 = one decimal. For less than 1 = 2 (Metric) & 2 (Imperial) decimal places.	10.2	Y
windDirection	The direction from which the wind blows expressed in degrees. The magnetic direction varies from 0 to 359 degrees, where 0° indicates the North, 90° the East, 180° the South, 270° the West, and so forth.	[integer]	0<=wind_dire_deg<=350, in 10 degree interval	60	Y
windDirectionCardinal	This field contains the cardinal direction from which the wind blows in an abbreviated form. Wind	[string]	N, NNE, NE, ENE, E, ESE, SE, SSE, S, SSW, SW, WSW, W, WNW,	ENE	Y

	directions are always expressed as “from whence the wind blows” meaning that a North wind blows from North to South. If you face North in a North wind, the wind is at your face. Face southward and the North wind is at your back.		NW, NNW, CALM		
windGust	This data field contains information about sudden and temporary variations of the average Wind Speed. The report always shows the maximum wind gust speed recorded during the observation period. It is a required display field if Wind Speed is shown.	[integer]	-	28	Y
windSpeed	The wind is treated as a vector; hence, winds must have direction and magnitude (speed). The wind information reported in the hourly current conditions corresponds to a 10-minute average called the sustained wind speed. Sudden or brief variations in the wind speed are known as “wind gusts” and are reported in a separate data field. Wind directions are always expressed as "from whence the wind blows" meaning that a North wind blows from North to South. If you face North in a North wind the wind is at your face. Face southward and the North wind is at your back.	[integer]		8	Y
wxPhraseLong	A text description of the observed weather conditions at the location	[string]		Partly Cloudy	Y

JSON Sample


```
// Response Collapsed for Presentation Purposes
[
   {
      "id": "33.74,-84.39",
      "v3-wx-conditions-historical-hourly-1day": {
                “cloudCeiling”:[1200...],
                "dayOfWeek": ["Saturday",...],
                "dayOrNight": ["D",...],
                "expirationTimeUtc": [1474132031,...],
                "iconCode": [30,...],
                "iconCodeExtend": [3000,...],
                "precip24Hour": [0,...],
                "pressureAltimeter": [30.14,...],
                "pressureChange": [-0.05,...],
                "pressureMeanSeaLevel": [1020.6,...],
                "pressureTendencyCode": [2,...],
                "pressureTendencyTrend": ["Falling",...],
                "relativeHumidity": [51,...],
                "snow24Hour": [0,...],
                "sunriseTimeLocal": ["2016-09-17T07:21:26-0400",...],
                "sunriseTimeUtc": [1474111286,...],
                "sunsetTimeLocal": ["2016-09-17T19:39:03-0400",...],
                "sunsetTimeUtc": [1474155543,...],
                "temperature": [86,...],
                "temperatureChange24Hour": [-2,...],
                "temperatureDewPoint": [66,...],
                "temperatureFeelsLike": [89,...],
                "temperatureHeatIndex": [89,...],
                "temperatureMax24Hour": [90,...],
                "temperatureMaxSince7Am": [86,...],
                "temperatureMin24Hour": [67,...],
                "temperatureWindChill": [86,...],
                "uvDescription": ["High",...],
                "uvIndex": [7,...],
                "validTimeLocal": ["2016-09-17T12:45:00-0400",...],
                "validTimeUtc": [1474130700,...],
                "visibility": [10,...],
                "windDirection": [110,...],
                "windDirectionCardinal": ["ESE",...],
                "windGust": [null,...],
                "windSpeed": [9,...],
                "wxPhraseLong": ["Partly Cloudy",...]
   }
]
```